AMSAT News Service Weekly Bulletins
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AMSAT NEWS SERVICE
ANS-191

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISSat-1/KEDR Deployment Timeline Driven by ISS Schedules
* AO-51 Operations Update
* AMSAT Awards
* Satellite Beginners Workshop Planned For AMSAT-UK 2011 Colloquium
* Satellite Shorts From All Over
* More University Satellite Missions in Preparation

SB SAT @ AMSAT $ANS-191.01
ARISSat-1/KEDR Deployment Timeline Driven by ISS Schedules

AMSAT News Service Bulletin 191.01
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
BID: $ANS-191.01

ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM provided the latest deployment information to the AMSAT News Service. Gould said he and ARISS Hardware Engineer Lou McFadin, W5DID participated in a teleconference call this week with NASA to review the Roscosmos EVA procedures for the release of ARISSat-1/KEDR during Russian EVA 29.

Gould says the preparation procedures include the battery being charged and assembled into the satellite. Also discussed were the procedures to remove the protective quilts from the solar cells and turning on the safety switches prior to deployment.

As to the date of deployment, Gould summarized, "The deployment date for ARISSat is still soft, a major factor is the shuttle launch. As of July 6 the EVA date is in early August, but the shuttle launch and docking are driving the timeline. During our discussion it was noted that the ARISSat/KEDR deployment is the first task of the EVA, so it will occur fairly soon after the EVA begins. Since we have no firm date or time for the EVA we cannot predict where the satellite will be heard first. We will let everyone know more as we know more."

[ANS thanks ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM for the above information]

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SB SAT @ AMSAT $ANS-191.02
AO-51 Operations Update

AMSAT News Service Bulletin 191.02
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
BID: $ANS-191.02

AMSAT Vice-President of Operations Drew Glasbrenner, KO4MA, provided the latest details in AMSAT's work to keep AO-51 operational for as long as possible.

Drew wrote, "Keeping AO-51 operating requires the US command team routinely restarting the satellite, and tweaking the power settings to find a combination of operating parameters to get it through eclipse. Currently one of the 6 battery cells onboard is shorted, and another is in really poor shape."

Continuing, Drew explains, "The onboard computer was crashing each orbit because of low voltage when the solar cells were no longer receiving illumination and the satellite relies entirely on its internal battery power. Through experimentation the Command Team seems to have found a balance point where it will sometimes go up to two days before crashing."

Each time the computer crashes the Command Team has to restart it using the housekeeping software onboard in ROM. The firmware code has a limited functionality compared to the normal flight software which we would upload from the ground over a few days time. However the eclipses and battery problem were causing a crash before the upload can complete.

Drew concludes, "With lots of luck we will be able to continue to limp along. How long is anyone's guess. I'd encourage you to use AO-51 while it's available, and to financially support new satellite programs like Kiwisat, Funcube, and Fox when you can."

Uplink: 145.880 MHz, no tone.
Downlink: 435.150 MHz
The repeater is open to all when the satellite is operational.

Keep up with the latest AO-51 Control Team News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks AMSAT-NA VP Operations Drew Glasbrenner, KO4MA for the above information]

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SB SAT @ AMSAT $ANS-191.03
AMSAT Awards

AMSAT News Service Bulletin 191.03
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
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AMSAT Director Contests and Awards, Bruce Paige, KK5DO says that congratulations are in order for these satellite operators for having earned these operating awards:

The following have entered into the Satellite Communicators Club
for making their first satellite QSO:
+ Robert Sheskin, N3PPH

The following have earned the AMSAT Communications Achievement Award:
+ Claudio Ferrari, IK1YRC #537
+ Berufliches Schulzentrum Elektrotechnik Dresden, DL0IKT
  (club station) #538
+ Mark Korroch, WB8TGY #539

The following have earned the AMSAT Sexagesimal Award:
+ Mark Korroch, WB8TGY #161

The following have earned the South Africa Satellite Communications
Achievement award:
+ Berufliches Schulzentrum Elektrotechnik Dresden, DL0IKT
  (club station) #US167
+ Mark Korroch, WB8TGY #US168

The following earned upgrades to their basic Robert W. Barbee Jr.,
W4AMI Award:
+ Gail McDaniel, KB0RZD 2K, 3K, 4K

The following have earned their Robert W. Barbee Jr., W4AMI
5000 Award:
+ Gail McDaniel, KB0RZD #28

To see all the awards visit http://www.amsat.org.

Bruce also reminds you that mere hours remain before the dead-
line to send in your satellite Field Day results. The Satellite
Summary Sheet (on pages 3-4 of the AMSAT Field Rules) should be
used for submission of the AMSAT Field Day competition.

The Rules and the Satellite Summary Sheet can be downloaded from
links at http://www.amsat.org or http://www.amsatnet.com

http://tinyurl.com/3eztlaf (amsat.org)
http://www.amsatnet.com/2011fd.doc
http://www.amsatnet.com/2011fd.pdf

Your entry must be received by KK5DO (email or postal mail) by 11:59
P.M. CDT, Monday, July 11, 2011. The preferred method for submitting
your log is via e-mail to kk5do@amsat.org or kk5do@arrl.net.

You will receive an email back (within one or two days) from Bruce
when he receives your email submission. If you do not receive a con-
firmation message, try sending it again or send it to his other email
address.

Certificates will be awarded to the first-place emergency power/
portable station at the AMSAT General Meeting and Space Symposium
in November 2011. Certificates will also be awarded to the second
and third place portable/emergency operation in addition to the
first-place home station running on emergency power. Stations sub-
mitting high, award-winning scores will be requested to send in
dupe sheets for analog contacts and message listings for digital
downloads.

[ANS thanks AMSAT Director of Awards and Contests, Bruce Paige,
  KK5DO for the above information]

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SB SAT @ AMSAT $ANS-191.04
Satellite Beginners Workshop Planned For AMSAT-UK 2011 Colloquium

AMSAT News Service Bulletin 191.04
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
BID: $ANS-191.04

AMSAT-UK will be holding a Satellite Beginner's Workshop at 4pm on Friday afternoon, July 29, to teach newcomers how to get started in the fascinating world of Amateur Radio Space communications.

With some satellites you can communicate using little more than a standard dual-band FM handheld. Others use SSB or CW and permit intercontinental DX communications using the VHF/UHF bands.

The Beginners Workshop will be run by Dave G4DPZ and Carlos G0AKI and takes place at the Holiday Inn, Guildford, GU2 7XZ. Look for the RSGB GB4FUN vehicle in the car park.

The AMSAT-UK International Space Colloquium takes place Saturday/Sunday, July 30/31, details at:
http://www.uk.amsat.org/

Don't forget your camera ...

AMSAT-UK has just launched a new look website http://www.uk.amsat.org/

As part of this new look, we have embarked on a new photo gallery, so if you have any photos related to AMSAT-UK, feel free to upload to our new Gallery, which can be found here:
http://www.uk.amsat.org/Gallery3/

[ANS thanks AMSAT-UK for the above information]

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SB SAT @ AMSAT $ANS-191.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 191.05
>From AMSAT HQ SILVER SPRING, MD.
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To All RADIO AMATEURS
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+ SO-67 has returned to operation after recovery from a cosmic ray upset. Operation over North America has already taken place between July 7-10. Operation over Europe is planned for July 11-17. Operation over Australia, New Zealand, Japan is planned for July 18-31. The latest details are posted at:
  http://www.amsatsa.org.za/

+ You can turn your smartphone into an ISS visible pass predictor with the iPhone and Android aps available at:
  http://simpleflybys.com .
  Web based predictions are also available using the Simple Satellite Tracker at http://spaceweather.com/flybys .

+ UniverseToday has an interesting news item today about United Launch Alliance's launch complex. Take a tour starting at:

http://www.universetoday.com/87156/launch-complex-37b-level-by-level/

+ Goddard Space Flight Center has released a video (with sound) so you can experience first-hand a ride aboard a sounding rocket. Hold on to your tummy and watch at: http://tinyurl.com/3ptsgrh (UniverseToday)

+ Giving practical definition to the informal Q-signal "QLF? - Are you you sending with your left foot?" the Giant Morse Key constructed by 2E0DIT will reappear at ASTROFAIR 2011 Sidmouth, Devon on August 6. For more info see: http://projects.exeter.ac.uk/nlo/Astronomy_Fair~EN.php Watch the video at Southgate - http://tinyurl.com/68dase2 to see if your shoe size measures up.

+ UniverseToday posted photos and video of the testing and integration of NASA's Orion Multi Purpose Crew Vehicle: http://tinyurl.com/6zm4wn8

+ A photo gallery of the Minotaur rocket launch from the Virginia coast is posted at: http://www.spaceflightnow.com/minotaur/ors1/launch/

+ Congratulations to Jeff, WB3JFS for earning his VUCC Satellite Award #217!

+ Stefan HB9ZEM has released a video showing his prototype Amateur Radio satellite Azimuth/Elevation tracker. See: http://www.southgatearc.org/news/july2011/satellite_tracker_video.htm

+ See what you missed at Friedrichshafen: http://www.southgatearc.org/news/july2011/friedrichshafen_video.htm

+ The 2nd Issue of The Egyptian Radio Amateur Magazine "CQ EGYPT" JULY 2011 is at: http://erasd.net/CQSUAMATEURRADIOMAGAZIN.aspx

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-191.06
More University Satellite Missions in Preparation

AMSAT News Service Bulletin 191.06
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
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Italian EduSAT Launch July 21

EduSAT is funded and coordinated by Italian Space Agency with the aim to promote space education among high school students and to support the qualification and scientific careers of young people, as university students, PhD students and young researchers. Another target of this program is to develop a small space mission for low cost scientific experiments and technological tests in orbit.

Edusat is currently slated to launch on a Russian Dnepr-1 on July 21. It is planned that Eduasat will deploy the MyPocketQubs, the two Eagle payloads and the ScoutQub sometime after launch. Its downlink will operate under an Italian Telecommunications Ministry experimental licence on 435.750 MHz.

The Group of Astrodynamics of the "Sapienza" University of Roma
(GAUSS) web page is at: http://tinyurl.com/6kov8ow

UNM's Trailblazer CubeSat Planned Launch March 2012

The Configurable Space Microsystems Innovations and Applications Center (Cosmiac) of The University of New Mexico has received notice from NASA that UNM's Trailblazer satellite has been manifested on the Educational Launch of Nanosatellites (ELaNa) IV Mission on a Falcon 9 rocket. This satellite will provide a proof of concept flight for an Air Force Sponsored bus design called Space Plug-and-play Architecture (SPA). The PnP type architecture is a capability that will allow for rapid satellite development and delivery similar to what is currently available in a home computer. The payload includes a variety of space weather projects including a dosimeter, gyro and magnetometer. Plans call for a 325km circular orbit with a 51.6 degree inclination. The IARU has coordinated a downlink frequency of 437.425 MHz.

Watch as Craig Kief, KE5VSH, deputy director of the Configurable Space Microsystems Innovations and Applications Center (COSMIAC) discusses the mission at: http://tinyurl.com/43ps2h2 (Southgate)

[ANS thanks the CubeSat Teams at GAUSS and UNM COSMIAC for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the ham who took up playing golf. He brought his XYL with him to the links but after a short while he had to tell her she asked too many questions. The XYL replied, "But I just asked why did you hit that ball into the lake?"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM